Claim Listing

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-36 (Cancelled).

Claim 37 (New). A method comprising the step of administering a macrocyclic lactone, a benzolactam, a pyrrolidinone or a combination thereof to a subject in need thereof in an amount effective to decrease soluble Aβ-40.

Claim 38 (New). The method of claim 37, further comprising the step of identifying a subject with increased soluble Aβ-40 levels compared to a control population.

Claim 39 (New). The method of claim 37, wherein the macrocyclic lactone, the benzolactam, the pyrrolidinone or the combination thereof decreases mean soluble Aβ-40 by about 35%.

Claim 40 (New). The method of claim 37, wherein the macrocyclic lactone, the benzolactam, the pyrrolidinone or the combination thereof decreases the soluble Aβ-40 by between about 8% and 50%.

Claim 41 (New). The method of claim 38, wherein the macrocyclic lactone, the benzolactam, the pyrrolidinone or the combination thereof decreases mean soluble Aβ-40 by about 35%.

Claim 42 (New). The method of claim 38, wherein the macrocyclic lactone, the benzolactam, the pyrrolidinone or the combination thereof decreases the soluble Aβ-40 by between about 8% and 50%.

Claim 43 (New). The method of claim 37, wherein the macrocyclic lactone is a bryostatin class or neristatin class compound.

Claim 44 (New). The method of claim 43, wherein the bryostatin class compound is bryostatin-1 through bryostatin-18 or neristatin-1.

Claim 45 (New). The method of claim 38, wherein the macrocyclic lactone is a bryostatin class or neristatin class compound.

Claim 46 (New). The method of claim 45, wherein the bryostatin class compound is bryostatin-1 through bryostatin-18 or neristatin-1.

Claim 47 (New). The method of claim 37, wherein the subject suffers from a neurological disease or disorder.

Claim 48 (New). The method of claim 47, wherein the neurological disease is Alzheimer's Disease, multi-infarct dementia, the Lewy-body variant of Alzheimer's Disease with or without association with Parkinson's disease; Creutzfeld-Jakob disease, Korsakow's disorder, or attention deficit hyperactivity disorder.

Claim 49 (New). The method of claim 48, wherein the neurological disease is Alzheimer's Disease.

Claim 50 (New). The method of claim 38, wherein the subject suffers from a neurological disease or disorder.

Claim 51 (New). The method of claim 50, wherein the neurological disease is Alzheimer's Disease, multi-infarct dementia, the Lewy-body variant of Alzheimer's Disease with or without association with Parkinson's disease; Creutzfeld-Jakob disease, Korsakow's disorder, or attention deficit hyperactivity disorder.

Claim 52 (New). The method of claim 51, wherein the neurological disease is Alzheimer's Disease.

Claim 53 (New). A method comprising the step of administering a macrocyclic lactone, a benzolactam, a pyrrolidinone or a combination thereof to a subject in need thereof in an amount effective to decrease soluble Aβ-42.

Claim 54 (New). The method of claim 53, further comprising the step of identifying a subject with increased soluble Aβ-42 levels compared to a control population.

Claim 55 (New). The method of claim 53, wherein the macrocyclic lactone, the benzolactam, the pyrrolidinone or the combination thereof decreases mean soluble Aβ-42 by about 59%.

Claim 56 (New). The method of claim 53, wherein the macrocyclic lactone, the benzolactam, the pyrrolidinone or the combination thereof decreases the soluble Aβ-42 by between about 25% and 77%.

Claim 57 (New). The method of claim 54, wherein the macrocyclic lactone, the benzolactam, the pyrrolidinone or the combination thereof decreases mean soluble Aβ-42 by about 59%.

Claim 58 (New). The method of claim 54, wherein the macrocyclic lactone, the benzolactam, the pyrrolidinone or the combination thereof decreases the soluble Aβ-42 by between about 25% and 77%.

Claim 59 (New). The method of claim 53, wherein the macrocyclic lactone is a bryostatin class or neristatin class compound.

Claim 60 (New). The method of claim 59, wherein the bryostatin class compound is bryostatin-1 through bryostatin-18 or neristatin-1.

Claim 61 (New). The method of claim 54, wherein the macrocyclic lactone is a bryostatin class or neristatin class compound.

Claim 62 (New). The method of claim 61, wherein the bryostatin class compound is bryostatin-1 through bryostatin-18 or neristatin-1.

Claim 63 (New). The method of claim 53, wherein the subject suffers from a neurological disease or disorder.

Claim 64 (New). The method of claim 63, wherein the neurological disease is Alzheimer's Disease, multi-infarct dementia, the Lewy-body variant of Alzheimer's Disease with or without association with Parkinson's disease; Creutzfeld-Jakob disease, Korsakow's disorder, or attention deficit hyperactivity disorder.

Claim 65 (New). The method of claim 64, wherein the neurological disease is Alzheimer's Disease.

Claim 66 (New). The method of claim 54, wherein the subject suffers from a neurological disease or disorder.

Claim 67 (New). The method of claim 66, wherein the neurological disease is Alzheimer's Disease, multi-infarct dementia, the Lewy-body variant of Alzheimer's Disease with or without association with Parkinson's disease; Creutzfeld-Jakob disease, Korsakow's disorder, or attention deficit hyperactivity disorder.

Claim 68 (New). The method of claim 67, wherein the neurological disease is Alzheimer's Disease.

Claim 69 (New). A method comprising the step of administering a macrocyclic lactone, a benzolactam, a pyrrolidinone or a combination thereof in an amount effective to lower total amyloid precursor protein ("APP").

Claim 70 (New). The method of claim 69, further comprising the step of identifying a subject with elevated APP levels compared to a control population.

Claim 71 (New). The method of claim 69, wherein the macrocyclic lactone, the benzolactam, the pyrrolidinone or the combination thereof lowers mean total APP by about 40%.

Claim 72 (New). The method of claim 69, wherein the macrocyclic lactone, the benzolactam, the pyrrolidinone or the combination thereof lowers the total APP by up to about 67%.

Claim 73 (New). The method of claim 70, wherein the macrocyclic lactone, the benzolactam, the pyrrolidinone or the combination thereof lowers mean total APP by about 40%.

Claim 74 (New). The method of claim 70, wherein the macrocyclic lactone, the benzolactam, the pyrrolidinone or the combination thereof lowers the total APP by up to about 67%.

Claim 75 (New). The method of claim 69, wherein the macrocyclic lactone is a bryostatin class or neristatin class compound.

Claim 76 (New). The method of claim 75, wherein the bryostatin class compound is bryostatin-1 through bryostatin-18 or neristatin-1.

Claim 77 (New). The method of claim 70, wherein the macrocyclic lactone is a bryostatin class or neristatin class compound.

Claim 78 (New). The method of claim 77, wherein the bryostatin class compound is bryostatin-1 through bryostatin-18 or neristatin-1.

Claim 79 (New). The method of claim 69, wherein the subject suffers from a neurological disease or disorder.

Claim 80 (New). The method of claim 79, wherein the neurological disease is Alzheimer's Disease, multi-infarct dementia, the Lewy-body variant of Alzheimer's Disease with or without association with Parkinson's disease; Creutzfeld-Jakob disease, Korsakow's disorder, or attention deficit hyperactivity disorder.

Claim 81 (New). The method of claim 80, wherein the neurological disease is Alzheimer's Disease.

Claim 82 (New). The method of claim 70, wherein the subject suffers from a neurological disease or disorder.

Claim 83 (New). The method of claim 82, wherein the neurological disease is Alzheimer's Disease, multi-infarct dementia, the Lewy-body variant of Alzheimer's Disease with or without association with Parkinson's disease; Creutzfeld-Jakob disease, Korsakow's disorder, or attention deficit hyperactivity disorder.

Claim 84 (New). The method of claim 83, wherein the neurological disease is Alzheimer's Disease.